

# START

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TSD: N/A  
ERA: N/A

## APPROVAL PAGE

Title of Document: Site Specific Health & Safety Plan,  
200-UP-1 Groundwater Treatability Test

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The approval signatures on this page indicate that this document has been authorized for information release to the public through appropriate channels. No other forms or signatures are required to document this information release.

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Total pages 13

BHI-DIS done 12/30/94

# SITE SPECIFIC HEALTH AND SAFETY PLAN

REV. 01

Expires 12/1/95

Project Name/Description/Requested By: 200-UP-1 Groundwater Treatability Test.

F. W. Gustason, Test Engineer

This Safety Plan covers field activities associated with the pilot-scale removal of Technetium<sup>99</sup> and Uranium from groundwater underlying the 200-UP-1 Operable Unit, 200 West Area. The process involves pumping groundwater from Well #299-W19-23 or alternate(s) through ion-exchange resin columns and then returned to the aquifer. Filters installed upstream of the resin columns remove particulates from the process stream while two storage tanks serve as temporary storage for both pre-treated and treated water to meet optimal process flow requirements.

**NOTE:** Changes made to this safety plan must be documented on a Field Change Authorization Form (attached) and have the approval of the Site Safety Officer.

|                                                                                                                                                                                                                                                                                                                                                                                      |                              |                              |                               |                               |                                         |                              |                              |                               |                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|-----------------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------------------------------------------|
| <p>Location:</p> <table> <tr> <td><input type="checkbox"/> 100</td> <td><input type="checkbox"/> 300</td> <td><input type="checkbox"/> 600</td> <td><input type="checkbox"/> 1100</td> </tr> <tr> <td><input checked="" type="checkbox"/> 200</td> <td><input type="checkbox"/> 400</td> <td><input type="checkbox"/> 700</td> <td><input type="checkbox"/> 3000</td> </tr> </table> | <input type="checkbox"/> 100 | <input type="checkbox"/> 300 | <input type="checkbox"/> 600  | <input type="checkbox"/> 1100 | <input checked="" type="checkbox"/> 200 | <input type="checkbox"/> 400 | <input type="checkbox"/> 700 | <input type="checkbox"/> 3000 | Facility Name/Number: 200-UP-1 Groundwater Treatability Test Site |
| <input type="checkbox"/> 100                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> 300 | <input type="checkbox"/> 600 | <input type="checkbox"/> 1100 |                               |                                         |                              |                              |                               |                                                                   |
| <input checked="" type="checkbox"/> 200                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> 400 | <input type="checkbox"/> 700 | <input type="checkbox"/> 3000 |                               |                                         |                              |                              |                               |                                                                   |

Objective of Project:

- |                                                |                                            |                                                       |
|------------------------------------------------|--------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> FRA                   | <input type="checkbox"/> Drum Sampling     | <input type="checkbox"/> Drilling                     |
| <input type="checkbox"/> RIFS Characterization | <input type="checkbox"/> Sampling Soils    | <input type="checkbox"/> UST Removal                  |
| <input type="checkbox"/> RCRA                  | <input type="checkbox"/> Soil Removal      | <input checked="" type="checkbox"/> Treatability Test |
| <input type="checkbox"/> Scoping Study         | <input type="checkbox"/> Soil Gas Sampling | <input type="checkbox"/>                              |
| <input type="checkbox"/> Reconnaissance        | <input type="checkbox"/> Remediation       | <input type="checkbox"/>                              |
| <input type="checkbox"/> Spill Response        | <input type="checkbox"/> GW Sample         | <input type="checkbox"/>                              |

Site Description/History/Disposal Practices:

The 200-UP-1 Groundwater Treatment Site is located in the southeast quadrant of the intersection of Beloit Ave. and 16th Street, 200 West Area. An environmental enclosure (tent) provides weather protection for the process skid and other project equipment. Two 20,000 gallon tanks provide temporary storage of influent and effluent water.

Past operation of U-Plant resulted in the discharge of low-level radioactive liquid waste to filtration structures such as cribs, ponds, ditches and injection wells. These wastes eventually migrated to the aquifer underlying U-Plant and beyond.

# SITE SPECIFIC HEALTH AND SAFETY PLAN

## KEY PERSONNEL TRAINING REQUIREMENTS

| Job Title and/or Name                | Training Requirements                                                     | Misc. Information                                  |
|--------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------|
| Project Operations/Support Personnel | A, C, D, F, I, L, S and Q                                                 |                                                    |
| Project Test Lead (FTL)              | A, C, D, E, F, I, L, S and Q                                              |                                                    |
| Project Safety Rep. (SSO)            | A, C, D, E, F, I, L, and Q                                                | <sup>(1)</sup> Maintenance persons performing work |
| Maintenance Personnel <sup>(1)</sup> | A, C, D, F, I, L, and Q                                                   | not associated with breached process               |
| Radiation Control Technicians (RCT)  | A, C, D, F, I, L, and Q                                                   | system and where there is no potential             |
| Visitors <sup>(2)</sup>              | Q and R                                                                   | for chemical or radiological exposure;             |
| Industrial Hygiene Technicians       | A, C, D, F, I, L and Q                                                    | eg, electricians working on electrical             |
|                                      | NOTE: Rad. Worker Training (I or II) and bioassay, whole body/chest count | panels, need only meet "visitor"                   |
|                                      | requirements are per controlling RWP.                                     | requirements.                                      |
|                                      | Visitors shall comply with all                                            | <sup>(2)</sup> Visitors are persons not directly   |
|                                      | instructions/directions from the FTL.                                     | associated with project operations and             |
|                                      |                                                                           | have no need to enter RCA(s), are not              |
|                                      |                                                                           | associated with breached system                    |
|                                      |                                                                           | activities, and have no foreseeable                |
|                                      |                                                                           | potential for chemical or radiological             |
|                                      |                                                                           | exposure. Otherwise, visitors shall                |
|                                      |                                                                           | meet project operations requirements.              |

List the letter(s) of training requirements (classes) required for individuals(s) named above.

|                                 |                                   |                                       |                     |
|---------------------------------|-----------------------------------|---------------------------------------|---------------------|
| A. 40 hr Haz. Waste             | G. Ska Pak                        | M. Bioassay                           | S. Process-specific |
| B. 24 hr Haz. Waste             | H. SCBA                           | N. Whole Body Count                   | T.                  |
| C. Rad. Worker Training I or II | I. First Aid/CPR                  | O. Chest Count                        | U.                  |
| D. 3 Day OJT                    | J. Noise Control                  | P. Asbestos Worker                    | V.                  |
| E. 8 Hr. Supervisor             | K. Mask Fit                       | Q. Read Safety Plan & Attend PJS Mtg. |                     |
| F. 8 Hr. Refresher              | L. Haz. Waste Worker Medical Exam | R. Escorted                           |                     |

# **SITE SPECIFIC HEALTH AND SAFETY PLAN** **WASTE TYPES, WASTE CHARACTERISTICS, AND HAZARD CONCERNS**

Waste Types:    ☐ Liquid    ☐ Solid    ☐ Gas    ☐ Unknown    ☐ Other Specify:

**Waste Characteristics:**

- |                                           |                                     |                                                                                            |
|-------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Chemical         | <input type="checkbox"/> Biological | <input checked="" type="checkbox"/> Radioactive (see RWP No. <u>D-187, 171 &amp; 222</u> ) |
| <input type="checkbox"/> Corrosive        | <input type="checkbox"/> Flammable  | <input type="checkbox"/> Unknown                                                           |
| <input checked="" type="checkbox"/> Toxic | <input type="checkbox"/> Volatile   | <input type="checkbox"/> Other specify:                                                    |
| <input type="checkbox"/> Inert            | <input type="checkbox"/> Reactive   | <input type="checkbox"/>                                                                   |

**Hazards of Concern:**

- |                                                           |                                                              |                                                    |
|-----------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> Temperature Extremes             | <input type="checkbox"/> Noise                               | <input checked="" type="checkbox"/> Biological     |
| <input checked="" type="checkbox"/> Fire Hazards          | <input checked="" type="checkbox"/> Electrical               | <input checked="" type="checkbox"/> Compressed Air |
| <input type="checkbox"/> Off Road Vehicle Use             | <input checked="" type="checkbox"/> Lifting                  | <input type="checkbox"/>                           |
| <input checked="" type="checkbox"/> Remote Work Area      | <input checked="" type="checkbox"/> Sanitation               | <input type="checkbox"/>                           |
| <input checked="" type="checkbox"/> Hazard Communications | <input checked="" type="checkbox"/> Permits                  | <input type="checkbox"/>                           |
| <input checked="" type="checkbox"/> Pinch Points          | <input checked="" type="checkbox"/> Heavy Equipment          | <input type="checkbox"/>                           |
| <input checked="" type="checkbox"/> Overhead Hazards      | <input checked="" type="checkbox"/> Walking/Working Surfaces | <input type="checkbox"/>                           |

OVERALL HAZARD CLASSIFICATION:    ☐ High    ☐ Medium    ☒ Low    ☐ Negligible    ☐ Unknown

**JUSTIFICATION:**

Fully characterized, low level radiological groundwater contaminants and completely enclosed process system represent a low order of exposure potential during routine operations. Activities such as resin and filter change-out have a higher order of exposure risk but risks are controlled by RWPs D-187 Rev. 1, D-125 and D-222.

**NOTE: ANY EMPLOYEE WHO FINDS A CONDITION/ACTIVITY THAT THEY BELIEVE TO BE UNSAFE SHALL IMMEDIATELY REPORT IT TO THE SSO OR TASK LEAD. IF SUCH CONDITION/ACTIVITY POSES AN IMMINENT HAZARD, THE EMPLOYEE HAS AUTHORITY TO STOP WORK.**

# SITE SPECIFIC HEALTH AND SAFETY PLAN

## KNOWN CONTAMINANTS

| KNOWN CONTAMINANTS                          | PEL/TLV<br>(ppm or mg/m <sup>3</sup> )                   | IDLH<br>(ppm or mg/m <sup>3</sup> ) | WARNING<br>PROPERTIES/CONCENTRATION<br>(ppm or mg/m <sup>3</sup> ) | 1. TARGET ORGANS<br>2. EXPOSURE SYMPTOMS | IMMEDIATE FIRST<br>AID MEASURES |
|---------------------------------------------|----------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------|------------------------------------------|---------------------------------|
| Technetium <sup>99</sup>                    | 9x10 <sup>-6</sup> µCi/ml                                | N/A                                 | N/A                                                                | 1. BO                      2. N/A        | Decon per RCT direction         |
| Uranium <sup>238</sup>                      | 0.2mg/m <sup>3</sup> (air)<br>5x10 <sup>-11</sup> µCi/ml | N/A                                 | N/A                                                                | 1. K                      2. N/A         | Decon per RCT direction         |
| Carbon Tetrachloride<br>(CCl <sub>4</sub> ) | 5 ppm                                                    | 300 ppm                             | (A) Ether like odor/70-80 ppm                                      | 1. L, K, CNS, LS<br>2. D, HA, CD         | FA, MA                          |
|                                             |                                                          |                                     |                                                                    |                                          |                                 |
|                                             |                                                          |                                     |                                                                    |                                          |                                 |
|                                             |                                                          |                                     |                                                                    |                                          |                                 |

NA = Not Available  
U = Unknown  
NE = Non Established  
N/A = Not Applicable

### WARNING PROPERTIES

A = Odor  
B = Visual  
C = Irritant

### TARGET ORGANS

L = Liver  
K = Kidney  
LS = Lungs  
E = Eyes  
S/A = Skin Absorption  
CNS = Central Nervous System  
R = Respiratory System  
BO = Bone  
H = Hemopoietic (Blood)  
O = Other

### EXPOSURE SYMPTOMS

D = Dizziness  
I = Skin/Eye/Respiratory Irritant  
C = Confusion  
F = Fatigue  
H = Headache  
CD = CNS Depression  
N = Nausea  
W = Weakness  
V = Vomiting  
O = Other

### FIRST AID MEASURES

IrW = Irrigate with (H<sub>2</sub>O)  
FA = Get to Fresh Air  
MA = Medical Aid  
IS = Wash Soap and Water

# **SITE SPECIFIC HEALTH AND SAFETY PLAN** **CHECK LIST**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>TEMPERATURE EXTREMES</b> <input checked="" type="checkbox"/> N/A</p> <p>Monitor work periodically.<br/>Adjust work/rest regimen according to WGI.<br/>Minimize/maximize clothing where possible.<br/>Drink cool/warm liquids as appropriate.<br/>Discuss signs/symptoms of heat/cold stress.<br/>NOTE: Temperature extremes are related to seasonal climatic changes.<br/>Any introduced temperature extremes require SSO evaluation and approval</p> | <p><b>HEAVY EQUIPMENT/MACHINERY</b> <input type="checkbox"/> N/A</p> <p>Safety features/devices in place and functioning<br/>Warning signs in place where required.<br/>Flagger assigned where necessary.<br/>Proper rigging used.<br/>Guards in place.<br/>Swing radius roped off or guarded.<br/>Regular inspections of equipment</p> | <p><b>REMOTE WORK AREA</b> <input type="checkbox"/> N/A</p> <p>Know your location.<br/>Communication available - phone/radio<br/>First aid kit and trained personnel<br/>Know emergency numbers.<br/>Use buddy system when required by manager.</p> |
| <p><b>PERMITS</b> <input type="checkbox"/> N/A</p> <p>___ Confined Space Permit.<br/>___ Hot Work Permit.<br/>___ Fall Protection Work Plan.<br/><input checked="" type="checkbox"/> Radiation Work Permit.<br/>___ Excavation Permit.<br/>NOTE: Assure that all necessary permits are obtained prior to initiation of work</p>                                                                                                                             | <p><b>OVERHEAD HAZARDS</b> <input type="checkbox"/> N/A</p> <p>Secure loose overhead objects<br/>Do not go under suspended load<br/>Use tag lines to control loads<br/>Wear hardhat<br/>Post/barricade overhead hazard area(s) as appropriate<br/>Brief workers/visitors on overhead work activities</p>                                | <p><b>HAZARD COMMUNICATION</b> <input type="checkbox"/> N/A</p> <p>MSDS file in place and current.<br/>Containers labeled.<br/>Workers apprised of new chemical hazards.</p>                                                                        |
| <p><b>PINCH POINTS</b> <input type="checkbox"/> N/A</p> <p>Assure guards in place<br/>Brief site personnel on location of potential pinch points.<br/>Identify or post areas where guarding is not appropriate or feasible.</p>                                                                                                                                                                                                                             | <p><b>ELECTRICAL</b> <input type="checkbox"/> N/A</p> <p>GFCI in outdoor/wet locations.<br/>Grounding of equipment.<br/>Tools and cords in good condition.<br/>Cords protected.<br/>Exposed wiring guarded or covered.</p>                                                                                                              | <p><b>NOISE</b> <input checked="" type="checkbox"/> N/A</p> <p>Hearing protection worn.<br/>Signs posted.<br/>Hearing conservation training</p>                                                                                                     |
| <p><b>WALKING/WORKING SURFACES</b> <input type="checkbox"/> N/A</p> <p>Carry out daily housekeeping efforts.<br/>Keep walkways/work areas clear.<br/>Designate walkways/routes where appropriate.<br/>Flag or post problem areas where necessary.</p>                                                                                                                                                                                                       | <p><b>SANITATION</b> <input type="checkbox"/> N/A</p> <p>Portable toilets on site or within vehicle reach.<br/>Potable water/cups.<br/>Wash water and soap.<br/>Eating/smoking in designated areas only. Empty trash and waste food receptacles daily.</p>                                                                              | <p><b>LIFTING</b> <input type="checkbox"/> N/A</p> <p>Use proper lifting techniques<br/>Use buddy system for awkward/heavy loads.<br/>Use mechanical lifting devices as appropriate</p>                                                             |
| <p><b>COMPRESSED AIR</b> <input type="checkbox"/> N/A</p> <p>Verify that system pressure is equal to ambient pressure prior to breaching system.<br/>Regulate pressure to lowest pressure needed to perform task.<br/>Do not use compressed air for cleaning dusty surfaces.</p>                                                                                                                                                                            | <p><b>FIRE HAZARDS</b> <input type="checkbox"/> N/A</p> <p>Flammable liquids stored properly.<br/>Combustible materials accumulation.<br/>Heaters approved type/installed properly.<br/>Fire extinguisher in place/proper type.<br/>Ignition sources eliminated or protected.</p>                                                       | <p><b>BIOLOGICAL</b> <input type="checkbox"/> N/A</p> <p>Control rodent intrusion and harborage<br/>Be cognizant of poisonous reptiles and insect harborages (cool, dark spaces and equipment that has laid on the ground overnight.)</p>           |

NOTE: If categories not applicable, check N/A.

**SITE SPECIFIC HEALTH AND SAFETY PLAN**  
MONITORING STRATEGY/ACTION LEVELS

| EQUIPMENT OR INSTRUMENT | FREQUENCY OF USE                            | ACTION LEVEL                                 | SPECIFIC ACTION(S)                                                                 |
|-------------------------|---------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------|
| E                       | 5                                           | 85 dBA (8-hr. TWA)                           | Determine hearing protection requirements. Post high noise areas                   |
| G                       | 6                                           | Per controlling RWP                          | See RWPs D-187 Rev.1, D-125, D-222                                                 |
| G                       | 3 (when system is breached)                 | Per controlling RWP                          | See RWPs D-187 Rev.1, D-125, D-222                                                 |
| C, M                    | 5 (only if propane/diesel heaters are used) | 19.5% O <sub>2</sub> , 25 ppm CO (8-hr. TWA) | Ventilate space, do not allow entry until monitoring demonstrates safe atmosphere. |
|                         |                                             |                                              |                                                                                    |
|                         |                                             |                                              |                                                                                    |
|                         |                                             |                                              |                                                                                    |

Where appropriate list the letter or number corresponding to the instrument or monitoring frequency in spaces above.

- A. PID
- B. FID
- C. CGI/LEL O<sub>2</sub>
- D. Detector Tubes
- E. Sound Level Meter
- F. Odyssey
- G. Rad Survey instrument(s)

- H. Radiation Surveys see RWP No. D-187 Rev.1, D-171, D-222
- I. Monitoring Not Required
- J. Personal Exposure Monitoring
- K. Biological Monitoring
- L. Halide Detectors
- M. CO Meter
- N.

- 1. Hourly
- 2. 15 Min.
- 3. Continuous
- 4. AM/PM
- 5. As determined by SSO
- 6. As determined by RCT/RWP
- 7.
- 8.

# **SITE SPECIFIC SAFETY HEALTH AND SAFETY PLAN** **PERSONAL PROTECTIVE EQUIPMENT**

| Job Task                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Work Zone/Location               | PPE Level                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Routine Process Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (10),(12), (7 at/in conex boxes) | Level "D"...HardHat, Substantial footwear, safety glasses                                                                                                                                                                          |
| Filter/resin Change-out                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (8),(12),RMSA & RBA              | As determined by controlling RWP/RCT                                                                                                                                                                                               |
| Maintenance activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | (10) (12)                        | (10)..Level "D", (12)..As per RCT/RWP                                                                                                                                                                                              |
| Sampling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (10),(12)                        | (10)..LEVEL "D", (12)..As per RCT/RWP                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | Note: Additional PPE may be needed for specific tasks/activities as per SSO/RCT or FTL                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  |                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  |                                                                                                                                                                                                                                    |
| <p>1. Sampling                      7. Support Zone                      13.</p> <p>2. Excavation                      8. SCA                      14.</p> <p>3. Decontamination                      9. Exclusion Zone                      15.</p> <p>4. Observation                      10. Control Zone                      16.</p> <p>5. Monitoring                      11. Support Zone                      17.</p> <p>6. Drilling                      12. RCA                      18.</p> |                                  | <p>Level "D" Blue Coveralls    Hard Hat                      Anti C'S per RWP</p> <p>(See    Chemical Gloves    Hearing Protection    Eye Protection</p> <p>above)    Steel Toed Shoes    Surgical Gloves    Splash Protection</p> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | Level "C" APR with _____ cartridge<br>plus level "D" above                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | Level "B" Airline respirator<br>Chemical resistant coveralls _____                                                                                                                                                                 |



**SITE SPECIFIC SAFETY HEALTH AND SAFETY PLAN**  
**SITE ACCESS AND WORK ZONES**

1. Support Zone

Is the area outside of roped boundry which includes conex boxes, Lunch/office trailers and portable toilet

2. Contamination Reduction Zone

N/A

3. Exclusion Zone

Temporary or permanent RCA(s)/SCA(s) and RBA(s) as determined by RCT/RWP for specific locations and/or activities

4. Control Zone

Inside of roped boundry

5.

SITE MAP

(See Figure-1 attached)

SITE SPECIFIC HEALTH AND SAFETY PLAN  
DECONTAMINATION PROCEDURES

| Personnel Decontamination                                                                                                                                                                                                                                                        | Sampling Equipment Decontamination               | Heavy Equipment Decontamination |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------|
| Generally, no personal decon is required for routine activities. Rad decon may be needed for tools and other equipment as determined by RCT survey. A portable shower (in tent) is available for personnel decon. No eating, smoking or drinking inside of Control Zone boundry. | Equipment decon requirements to be by RCT survey | N/A                             |

EQUIPMENT REQUIREMENTS CHECKLIST (Underline required items or add others)

- |                             |                           |                                      |     |
|-----------------------------|---------------------------|--------------------------------------|-----|
| 1. <u>FLUOR AND KH</u>      | 6. <u>Signs *</u>         | 11. <u>HEPA Vacuum</u>               | 16  |
| 2. <u>PPE</u> (see page #7) | 7. <u>Decon Equipment</u> | 12. <u>Supplemental Lighting</u>     | 17. |
| 3. Fire Extinguisher(s)     | 8. <u>Radio/Phone</u>     | 13. <u>Spill containment/cleanup</u> |     |
| 4. Wind Indicator           | 9. Breathing Air          | 14.                                  |     |
| 5. <u>Eye Wash</u>          | 10. Signal Device         | 15.                                  |     |

\* Control Zone, Authorized Personnel Only, No Smoking, Emergency Shut Off, Parking Area, and other informational/directional signs as deemed appropriate by SSO/FTL or RCT

Note: Additional equipment may be needed for specific, non-routine tasks as determined by SSO/FTL/RCT

SITE SPECIFIC HEALTH AND SAFETY PLAN  
EMERGENCY PROCEDURES/CONTACTS

CONTINGENCY PLANS

**FIRE:** 1. Alert others to evacuate; 2. Notify Fire Dept. (373-3800) on cell phone 911 on landline phone or by station radio. 3. Try to isolate or contain incipient fires without putting personnel at risk. 4. Direct Fire Dept. to fire.

**PERSONAL INJURY:** (other than minor 1st aid) 1. Alert others in area for assistance. 2. Transport injured to medical aid station or call for emergency responders. 3. Provide necessary assistance to injured; ie, stop arterial bleeding, treat for shock, monitor pulse and respiration. 4. Direct emergency responders to injured.

**CHEMICAL EXPOSURE.** 1. Alert others for assistance, if needed. 2. Notify SSO or HSO. 3. Taken necessary action to reduce exposure. 4. Show SSO/HSO location/operation/activity involving exposure.

EMERGENCY CONTACTS

NAME

PHONE

All Emergencies: Patrol Operations Center

373-3800

Health and Safety Officer: M. N. Kenter

(W) 373-9733 (Cell 539-2114)  
(H) 627-5080

Site Safety Officer: C. H. St.John

(W) 376-5459 (Cell 539-2129)  
(H) 946-7205

Fire Department: Battalion Chief North

373-3856 (911)

OU Task Lead: C. D. Wittreich

(W) 376-1862  
(H) 967-3540

Patrol: Hanford Patrol East

373-3800 (911)

IT Industrial Safety: J. C. Ellis

372-9548

Health Physics: M. A. Wesselman

(W) 376-2084  
(H) 943-4184

S. K. DeMers

(W) 376-3707  
(H) 582-5317

SPILL CONTROL PLAN

Contacts: Fire Dept., Hazard Material Team (373 3800/911)

Containment Kit Located: Connex Boxes and in tent.

Other Equipment: Shovels, plastic tubs/buckets, mops.

Actions to Take: 1. Alert others in area. 2. Notify HAZMAT Team, as appropriate. 3. Try to contain/stop spill using appropriate PPE and without putting personnel at risk. 4. Show location of spill to HAZMAT Team.

MEDICAL FACILITIES

LOCATION

PHONE

HEHF MEDICAL AID STATION: 2719 WA Bldg.

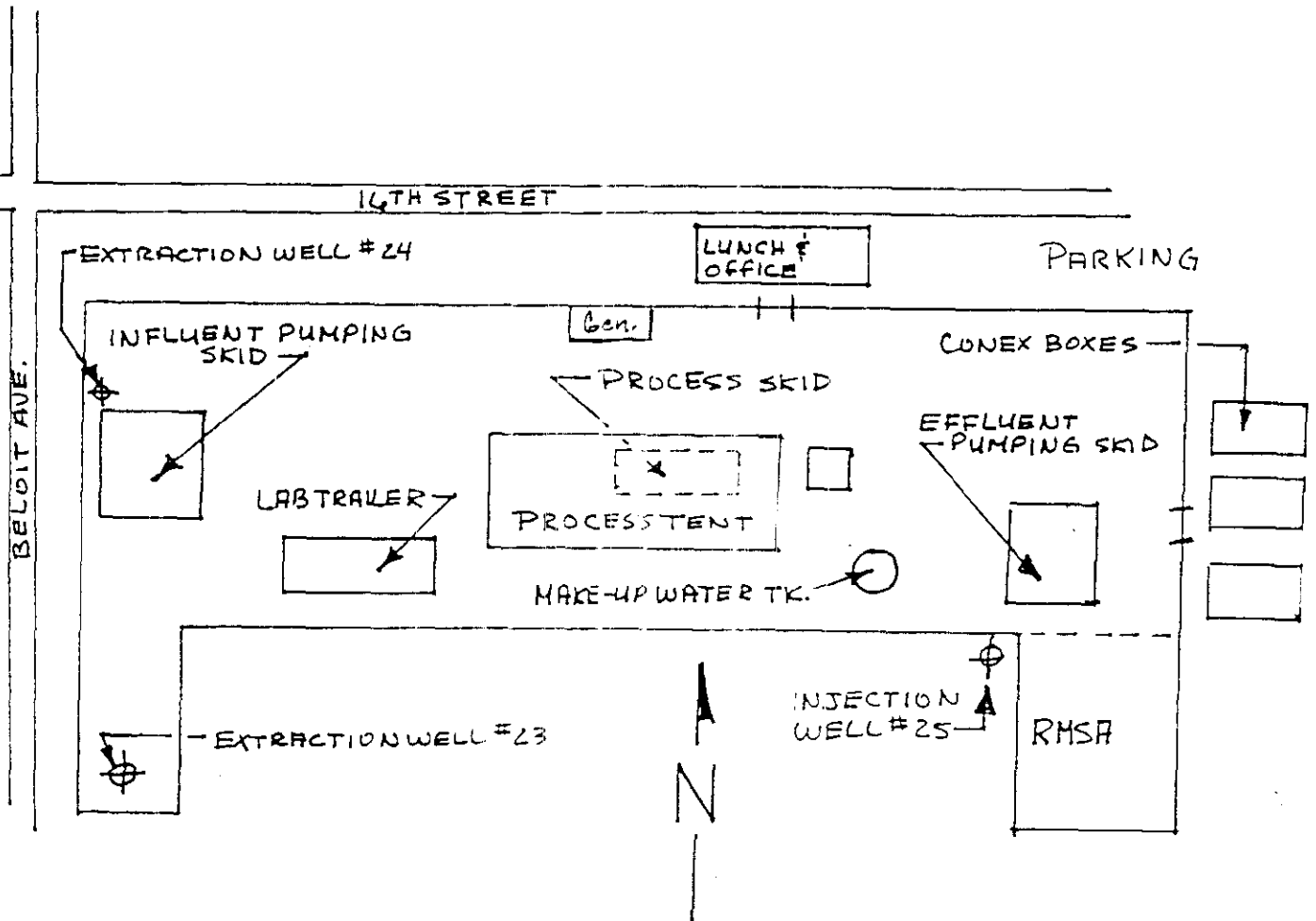
373-2714

KEDLEC HOSPITAL: Richland

946-4611

**ACTIONS TO TAKE:** If unusual symptoms are expressed, reported or noted, call Site Safety Officer or Field Support Service Task Lead (or alternates). If injury or illness is serious, call 373-3800 and give your location. Provide 1st aid as needed.

Figure-1  
200-UP-1 Groundwater Treatability Test Site Map



SITE SPECIFIC HEALTH AND SAFETY PLAN  
FIELD CHANGE AUTHORIZATION

Section to be Changed \_\_\_\_\_ Page \_\_\_\_\_

Person Requesting Change \_\_\_\_\_

Verbal Authorization by Health & Safety Officer \_\_\_\_\_  
Date \_\_\_\_\_ Time \_\_\_\_\_

Description of Change \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Justification for Change \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

Approved By \_\_\_\_\_  
Health & Safety Officer \_\_\_\_\_ Date/Time \_\_\_\_\_

Field Team Brief on Change By \_\_\_\_\_  
Name \_\_\_\_\_ Date/Time \_\_\_\_\_